The APPEAL (Advancing the Provision of Pain Education And Learning) Study Backgrounder

What is the APPEAL study?
The APPEAL study is the first ever Europe-wide review of pain education for undergraduates in Europe. Conducted by independent research company Adelphi Research in 15 European countries, the APPEAL study involved the review of publicly available curricula from 242 undergraduate medical schools. The APPEAL study goes beyond existing research by providing a more comprehensive analysis and understanding of pain learning. The research was conducted from April to September 2013 and is part of a Europe-wide initiative aimed at raising the profile and importance of pain education.1 This research was funded by Mundipharma International Limited.

Why was the APPEAL study needed?
Chronic pain affects 1 in 5 adults in Europe yet it remains poorly managed and under-treated.2 Lack of knowledge about pain among physicians is recognised as one of the key barriers to effective pain treatment and management.3 The previous evidence base indicates that pain education in many of the current undergraduate courses is inadequate preparation for professional practice, with inconsistencies in the way that it is taught.4,5,6,7 There is an urgent need to understand the gaps in the provision of pain education in order to address the deficit in healthcare professional knowledge of pain.3

How was the APPEAL study conducted?
Guided by a European expert Taskforce of pain and education specialists under the leadership of the European Pain Federation, EFIC®, the APPEAL study1 was conducted by independent research company Adelphi Research in two phases:

- Phase I: A cross-sectional survey of pain education offered in undergraduate medical studies across 15 countries in Europe, selected to be geographically representative and to maximise coverage of medical schools and student intake. This involved an assessment of publicly available undergraduate medical curricula of 242 medical schools for the academic year 2012-2013, sourced from reputable websites, to assess:
  - How pain teaching is provided
  - Time or credits spent teaching pain
  - Teaching methods employed
  - Assessment methods used.
Evidence was collected from the following European countries during this phase to ensure a geographic representation using the United Nations geographical region and composition classification: Belgium, Bulgaria, Denmark, France, Germany, Ireland, Italy, Netherlands, Poland, Portugal, Romania, Spain, Sweden, Switzerland and the United Kingdom.

Research conducted between April and September 2013.

**Phase II**: A qualitative assessment comprising in-depth interviews with deans, teaching staff and final-year undergraduate medical students in 10 countries in Europe to understand perspectives on current provision of pain education within the undergraduate medical curricula.

Evidence was collected from the following European countries during this phase to ensure a good geographic representation: Bulgaria, Denmark, France, Germany, Ireland, Italy, Poland, Spain, Switzerland and the United Kingdom.

Research conducted between June and September 2013.

Both phases of this research were funded by Mundipharma International Limited.

**Key findings**

- 82% of medical schools have no dedicated pain teaching that is compulsory.
- Even where there is dedicated teaching on pain that is compulsory, a medical student receives on average only 12 hours pain teaching as an undergraduate, representing just 0.2% of their entire medical teaching.
- 69% of medical schools across Europe have no dedicated pain teaching.
- The provision of pain education is variable and inconsistent. Nearly two-thirds of all undergraduate medical schools (62%) offer pain teaching only within other subjects – and these subjects vary across schools.
- Less than half of all (48%) medical schools employ practical teaching methods in the teaching of pain, and only a small minority (26%) use placement-based teaching.

**Why are the findings of the study important?**

The APPEAL findings highlight the inconsistencies and failings in the current provision of pain education at the undergraduate level across Europe. Pain education, especially for undergraduates, has been identified as important to changing problematic pain practices. The absence of appropriate pain education for undergraduates could mean that significant numbers of medical students graduate with limited knowledge and understanding of how to best manage and treat pain in clinical practice.

By providing a robust evidence base on this topic, it is now possible to build a case for change in the provision of pain education; ensuring consistency in pain teaching across different disciplines and between medical schools in Europe, and ensuring that pain teaching is compulsory for all undergraduate medical students, with a defined minimum level of pain learning outcomes.
The ultimate aim is to improve pain management practice, and positively impact the lives of millions of people suffering from pain across Europe.

What are the recommendations of the APPEAL expert Taskforce?

- The APPEAL expert Taskforce calls on medical schools, pain specialists, medical students and relevant policymakers to ensure that pain education for undergraduate medical students across Europe is fit for purpose to address the current unmet public health need to adequately manage and treat pain.
- To this end, the expert Taskforce recommends:
  1. The establishment of a European framework for pain education, developed jointly by pain specialists and educators and drawing on the EFIC® Core Curriculum in Pain Management, to ensure consistency in pain teaching within the undergraduate medical curriculum and between medical schools in Europe
  2. The introduction of compulsory pain teaching for all undergraduate medical students in Europe, to enable them to acquire a defined minimum level of competency in pain and up-to-date pain management
  3. Improved documentation of pain teaching within the undergraduate medical curriculum, with clearly stated teaching content and defined student competencies in pain.

The APPEAL study was conducted as part of a Europe-wide initiative aiming to raise the profile and importance of pain education. The initiative has been developed in conjunction with a multi-disciplinary group of experts under the leadership of EFIC®.

References

1 A Blueprint for Pain Education – the APPEAL (Advancing the Provision of Pain Education and Learning) study, 2013, Mundipharma data on file
5 Tauben DJ and Loeser JD. Pain education at the University of Washington School of Medicine. Journal of Pain 2013;14:431-437